WHAT IS CLAIMED IS:

1. A vacuum switching device comprising:

a vacuum interrupter;

a current exchange housing adjacent to the vacuum interrupter;

a seal provided around the vacuum interrupter and the current exchange housing so as to define a cavity within the current exchange housing and adjacent to the vacuum interrupter; and

a tube provided within the seal, the tube disposed such that a first end of the tube accesses the cavity and a second end of the tube accesses an exterior of the seal.

2. The vacuum switching device of claim 1 wherein the tube comprises a syringe needle inserted through the seal.

3. The vacuum switching device of claim 1 wherein the tube is integrally formed into the seal during formation of the seal.

4. The vacuum switching device of claim 1 wherein the second end of the tube is open to an encapsulation material provided around the vacuum interrupter, the current exchange housing, and the seal.

5. The vacuum switching device of claim 4 wherein the encapsulation material includes a pre-filled, hot-curing, two-component epoxy resin.

6. The vacuum switching device of claim 4 wherein a diameter of the tube is selected such that air within the cavity is permitted to escape from the cavity to the exterior of the seal during a molding process that involves injection of the encapsulation material in liquid form into a reduced-pressure space surrounding the vacuum interrupter, the current exchange housing, and the seal.

7. The vacuum switching device of claim 6 wherein the diameter of the tube is selected such that the encapsulation material in liquid form will not travel from the exterior

of the seal to the cavity during the injection, and will instead cure to block a passage of air between the exterior of the seal and the cavity.

8. The vacuum switching device of claim 1 comprising an operating rod extending through the seal into the cavity, and operable to actuate the vacuum interrupter.

9. A method comprising:

providing a seal around a vacuum interrupter and an air-filled cavity;

providing a tube within the seal, the tube having a first end adjacent to the air-filled cavity and a second end adjacent to an exterior of the seal; and

encapsulating the seal, the vacuum interrupter, and the air-filled cavity.

10. The method of claim 9 wherein encapsulating the seal, the vacuum interrupter, and the air-filled cavity comprises reducing an air pressure in an area of the exterior of the seal, such that air from within the air-filled cavity is removed from the air-filled cavity through the tube.

11. The method of claim 9 wherein encapsulating the seal, the vacuum interrupter, and the air-filled cavity comprises:

placing the seal, the vacuum interrupter, and the air-filled cavity into a mold, the mold containing a space that is in contact with the exterior of the seal;

removing air from the space that is in contact with the exterior of the seal;

injecting epoxy into the space in liquid form; and

removing the mold after a curing of the epoxy.

12. The method of claim 11 wherein removing air from the space comprises reducing a pressure differential between the air-filled cavity and the space by allowing a transfer of air from the air-filled cavity through the tube.

13. The method of claim 11 wherein removing the mold comprises:

removing a mold core along with the mold; and

inserting an operating rod for use in actuating the vacuum interupter into a cavity left by removal of the mold core.

14. The method of claim 13 wherein providing the seal comprises sealing the air-filled cavity against the mold core while injecting epoxy into the space that is in contact with the exterior of the seal.

15. The method of claim 11 wherein providing the tube within the seal comprises selecting the tube to have a diameter that allows air from the air-filled cavity to escape into the space that is in contact with the exterior of the seal, and prevents the liquid-form epoxy from traveling between the space that is in contact with the exterior of the seal and the air-filled cavity.

16. The method of claim 9 wherein providing the seal comprises:

providing a compliant material around the vacuum interrupter and the air-filled cavity; and

providing a plug adjacent to the compliant material, the plug being positioned to seal the air-filled cavity.

17. The method of claim 16 wherein providing the tube within the seal comprises providing the tube through the plug.

18. A vacuum switching device comprising:

a vacuum interrupter;

a hollow housing adjacent to the vacuum interrupter;

a seal provided around the vacuum interrupter and the hollow housing, the seal defining an air-filled cavity within the hollow housing; and

means for reducing a pressure differential between the air-filled cavity and a space exterior to the seal during a vacuum gelation process in which air pressure in the space is reduced for injection of a liquefied encapsulation material into the space, such that an integrity of the seal is maintained during the vacuum gelation process.

19. The vacuum switching device of claim 18 wherein the means for reducing a pressure differential includes an air passageway from the air-filled cavity to the space exterior to the seal.

20. The vacuum switching device of claim 18 wherein the means for reducing a pressure differential includes a tube inserted through the seal between the space and the air-filled cavity.

21. The vacuum switching device of claim 20 wherein the tube has a diameter large enough to reduce the pressure differential by transferring air from the air-filled cavity to the space exterior to the seal during the vacuum gelation process, and small enough to prevent transmission of the liquefied encapsulation material from the space into the air-filled cavity.